Resolution No. R1-2014-0006 Attachment 3

[Add a new sub-section to the Water Quality Control Plan for the North Coast Region implementation chapter (Chapter 4) with the following Action Plans. This section will be added after the "ACTION PLAN FOR THE KLAMATH RIVER TOTAL MAXIMUM DAILY LOADS ADDRESSING TEMPERATURE, DISSOLVED OXYGEN, NUTRIENT, AND MICROCYSTIN IMPAIRMENTS IN THE KLAMATH RIVER IN CALIFORNIA AND LOST RIVER IMPLEMENTATION PLAN." In addition to adding the following language, several editorial revisions will be made, including appropriate changes to the Title Page, Table of Contents, Summary of Basin Plan Amendments (Appendix 1), page numbers, table and figure numbers, footnote numbers, and headers and footers to reflect the new language. The final locations of tables and figures in relation to the text may also be changed to accommodate the existing formatting of the Basin Plan.]

ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE EEL RIVER WATERSHED

The USEPA has established Total Maximum Daily Loads (TMDL) for elevated temperature in the Upper Main Eel, Middle Main Eel, Lower Main Eel, South Fork Eel, North Fork Eel, and Middle Fork Eel River Watersheds¹. All of those temperature TMDLs have assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The following actions constitute the program of implementation to achieve the Eel River Watershed Temperature TMDLs and are consistent with the *Policy for the Implementation of the Water Quality Objectives for Temperature*.

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest Activities on Non- Federal Lands	Action Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are achieved during the timber harvest review process, as necessary.
Regional Water Board	Timeline Ongoing
Timber Harvest Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or water quality standards, implement additional measures as directed
Parties conducting timber harvest activities that discharge waste or have the potential to discharge waste	by Regional Water Board staff during the timber harvest review process. Timeline Ongoing

¹ Upper Main Eel River and Tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury) Total Maximum Daily Loads for Temperature and Sediment (2004), Middle Main Eel River and Tributaries (from Dos Rios to South Fork) Total Maximum Daily Loads for Temperature and Sediment (2005), Lower Eel River Total Maximum Daily Loads for Temperature and Sediment (2007), South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (1999), North Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (2002), and Middle Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (2003), each contain a problem statement, source analysis, numeric targets, load allocations, linkage analysis, and margin of safety. Please see the individual TMDL documents for more information.

4-1.00 3/2014

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Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
All Activities on	Action
USFS Lands Regional Water Board	Implement Order No. R1-2010-0029, Waiver of Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region, and any future revisions, (USFS Waiver of WDRs) as a mechanism for compliance with the water quality objectives for temperature.
	Action Regional Water Board staff shall make recommendations for additional measures to ensure the water quality objective for temperature is achieved during the project review process, as necessary.
	Timeline Ongoing
All Activities on	Action
Lands Managed by	Conduct land management activities in compliance with the USFS Waiver of WDRs and
the USFS	in accordance with project-level recommendations.
USFS	<u>Timeline</u> As required in the USFS Waiver of WDRs.
Agricultural Activities on Non- Federal Lands	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives.
Regional Water Board	Timeline Upon adoption
Agricultural Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting	Timeline
activities associated	Ongoing
with agriculture that	
discharge waste or	<u>Action</u>
have the potential to	Conduct land management activities in compliance with the Agricultural Lands
discharge waste on nonfederal land,	Discharge Program when adopted.
except dairies.	<u>Timeline</u>
	Upon adoption of the Agricultural Lands Discharge Program

4-2.00 3/2014

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land	
Use Activity	Implementation Actions
and	•
Responsible Party	
Road Construction	Action
and Maintenance	Implement the NPDES Statewide Storm Water Permit and Waste Discharge
of State Highway Facilities	Requirements for the State of California, Department of Transportation (Caltrans permit).
i aciiilles	permit).
State Water	
Resources Control	
Board	Timeline
Degional Water	Ongoing
Regional Water Board	
Road Construction	Action
and Maintenance	Conduct road construction, maintenance and associated activities
of State Highway	in compliance with the Caltrans permit.
Facilities	Timeline
Caltrans	Timeline Ongoing
Road Construction	Action
and Associated	Implement Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and
Maintenance on	General Water Quality Certification for County Road Management and Activities
County Lands	Conducted Under the Five Counties Salmonid Conservation Program In the Counties of
	Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coast Region (5C
Regional Water Board	Waiver of WDRs), and any future revisions.
Doard	Action
	In the event that a county does not show intent to implement the 5C Waiver of WDRs,
	develop WDRs or a conditional waiver of WDRs for that county.
	Timeline
	<u>Timeline</u> Ongoing
Road Construction	Action
and Maintenance	Conduct road construction and maintenance in compliance with the 5C Waiver of
on County Lands	WDRs.
Humboldt	Timeline
Humboldt, Mendocino, and	Timeline Pursuant to the 5C Waiver of WDRs timelines.
Trinity Counties	. a.oualit to the op trainer of trainer and animon
Dairy Operations	Action
	Implement temperature allocations through the Water Quality Compliance Program for
Regional Water	Dairies & Concentrated Animal Feeding Operations (Dairy Program), and any future
Board	revisions.
	<u>Timeline</u>
	Ongoing
Dairy Operations	Action
Dairy operators	Conduct land management activities in compliance with the Dairy Program.
	<u>Timeline</u>
	Ongoing
	1

4-3.00 3/2014

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Dredge and Fill Activities in Waters of the State	Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
Regional Water Board	Timeline Ongoing
Waste Discharge Requirement Program	Action Incorporate measures to meet the temperature allocations and water quality objectives for temperature in Waste Discharge Requirements and Waivers thereof.
Regional Water Board	Timeline Ongoing
Water Use Regional Water Board	Action Work with other agencies and non-governmental organizations to support off-stream storage projects for water diverters currently diverting directly from streams during summer. Work with other agencies and non-governmental organizations to streamline the permitting process for conversion of on-stream to off-stream storage.
State Water Resources Control Board, Division of Water Rights	Timeline Ongoing
Water Use Water users	Action The Regional Water Board encourages all water users to implement water conservation practices and develop off-stream storage facilities to minimize water diversions during low flow periods. Timeline Ongoing
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	 Action Pursue instream flow studies, including the following actions: Work with other agencies and non-governmental organizations to support instream flow studies to: (1) quantify flows necessary for beneficial use support, (2) quantify flow impacts to assist outreach and education efforts, or (3) identify opportunities to increase summer low flows. Coordinate with the California Department of Fish and Wildlife on the development, methodologies, and any criteria relevant to instream flow studies. Consider all sources of water, including headwaters, groundwater, and waters flowing in subterranean streams.
	Timeline Until complete

4-4.00 3/2014

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Support third-party efforts to address temperature related concerns, including: • Education of water users on the importance of water conservation efforts, • Education of water users on water conservation practices and opportunities, • Assistance for water users in the implementation of water conservation practices, • Restoration of riparian vegetation, • Other efforts that address water temperature-related concerns. Timeline Ongoing
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Take actions to address the temperature impacts of marijuana cultivation through the following:
Water Use Regional Water Board	Action Continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, conducting joint inspections as appropriate, submitting data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participating in instream flow studies, participating in proceedings related to instream flow, and participating by any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature. Timeline Ongoing

ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE NAVARRO RIVER WATERSHED

The USEPA has established Total Maximum Daily Loads (TMDL) for elevated temperature in the Navarro². The Navarro River Watershed Temperature TMDL has assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The Navarro River Watershed Temperature TMDL also identifies the alteration of flow as a factor that may elevate water temperatures in some situations, and sets a

4-5.00 3/2014

² The *Navarro River Total Maximum Daily Loads for Temperature and Sediment* (2000) contains a problem statement, source analysis, , numeric targets, load allocations, linkage analysis, and margin of safety. Please see the TMDL and supporting documents for more information.

4. IMPLEMENTATION PLANS

target of no increases in diverted flows unless it can be demonstrated that the flow reduction will not increase water temperatures. The following actions constitute a program of implementation to achieve the Navarro River Watershed Temperature TMDL and are consistent with the *Policy for the Implementation of the Water Quality Objectives for Temperature*.

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest	Action
Activities on Non- Federal Lands	Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are achieved during the timber harvest review process, as necessary.
Regional Water	
Board	<u>Timeline</u>
	Ongoing
Timber Harvest Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or water quality standards, implement additional measures as directed by Designably Mater Read that the time to be read to the first of the time to be read to the first of the time to be read to the first of the time to be read to the first of the time to be read to the first of the time to be read to the first of
Parties conducting timber harvest	by Regional Water Board staff during the timber harvest review process.
activities that	<u>Timeline</u>
discharge waste or	Ongoing
have the potential to	
discharge waste.	
Agricultural Activities on Non- Federal Lands	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives.
Regional Water Board	Timeline Upon adoption
Agricultural Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting	Timeline
activities associated	Ongoing
with agriculture that	
discharge waste or	Action
have the potential to	Conduct land management activities in compliance with the Agricultural Lands
discharge waste on nonfederal land,	Discharge Program when adopted.
except dairies.	Timeline
	Upon adoption of the Agricultural Lands Discharge Program

4-6.00 3/2014

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land	
Use Activity	Implementation Actions
and	
Responsible Party	
Road Construction	<u>Action</u>
and Maintenance	Implement the NPDES Statewide Storm Water Permit and Waste Discharge
of State Highway	Requirements for the State of California, Department of Transportation (Caltrans
Facilities	permit).
State Water	
Resources Control	
Board	
Regional Water	<u>Timeline</u>
Board	Ongoing
Road Construction	Action
and Maintenance	Conduct road construction, maintenance and associated activities in compliance with
of State Highway	the Caltrans permit.
Facilities	
	<u>Timeline</u>
Caltrans	Ongoing
Road Construction	Action
and Associated	Implement Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and
Maintenance on	General Water Quality Certification for County Road Management and Activities
County Lands	Conducted Under the Five Counties Salmonid Conservation Program In the Counties of
County Lands	Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coast Region (5C
Regional Water	Waiver of WDRs) and any future revisions.
Board	Traiter of Traiter and Talara Totalonio.
Board	Action
	In the event that a county does not show intent to implement the 5C Waiver of WDRs,
	develop WDRs or a conditional waiver of WDRs for that county.
	actions the conditional matter of the for that country.
	Timeline
	Ongoing
Road Construction	Action
and Maintenance	Conduct road construction and maintenance in compliance with the 5C Waiver of
on County Lands	WDRs.
Mendocino County,	
	Timeline
	Pursuant to the 5C Waiver of WDRs timelines
Dredge and Fill	Action
Activities in	Incorporate measures to meet the temperature allocations in 401 water quality
Waters of the State	certifications.
	
Regional Water	Timeline
Board	Ongoing
Waste Discharge	Action
Requirement	Incorporate measures to meet the temperature allocations and water quality objectives
Program	for temperature in Waste Discharge Requirements and Waivers thereof.
Pagional Water	Timolino
Regional Water	<u>Timeline</u>
Board	Ongoing

4-7.00 3/2014

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Implementation Actions
implementation Actions
Action
Action Work with other agencies and non-governmental organizations to support off-stream
storage projects for water diverters currently diverting directly from streams during
summer. Work with other agencies and non-governmental organizations to streamline
the permitting process for conversion of on-stream to off-stream storage.
Timeline
Ongoing
Origonia
Action
Action The Regional Water Board encourages all water users to implement water conservation
practices and develop off-stream storage facilities to minimize water diversions during
low flow periods.
ion non ponodo.
Timeline
Ongoing
Action
Pursue instream flow studies, including the following actions:
Work with other agencies and non-governmental organizations to support
instream flow studies to: (1) quantify flows necessary for beneficial use support,
(2) quantify flow impacts to assist outreach and education efforts, or (3) identify
opportunities to increase summer low flows.
Coordinate with the California Department of Fish and Wildlife on the
development, methodologies, and any criteria relevant to instream flow studies.
Consider all sources of water, including headwaters, groundwater, and waters
flowing in subterranean streams.
<u>Timeline</u>
Until complete
Action
Support third-party efforts to address temperature related concerns, including:
 Education of water users on the importance of water conservation efforts,
 Education of water users on water conservation practices and opportunities,
Assistance for water users in the implementation of water conservation
practices,
Restoration of riparian vegetation,
Other efforts that address water temperature-related concerns.
Timeline
Ongoing

4-8.00 3/2014

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Water Use	Action
Regional Water Board State Water Resources Control Board, Division of	Take actions to address the temperature impacts of marijuana cultivation, through the following:
Water Rights	Timeline Ongoing
Water Use Regional Water Board	Action Continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, conducting joint inspections as appropriate, submitting data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participating in instream flow studies, participating in proceedings related to instream flow, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature. Timeline Ongoing
Water Use State Water Resources Control Board, Division of	Action Achieve the Flow and Temperature target contained in the Navarro River Watershed Temperature TMDL through implementation of the Policy for Maintaining Instream Flows in Northern California Coastal Streams.
Water Rights	Timeline Ongoing

ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE MATTOLE RIVER WATERSHED

The USEPA has established a Total Maximum Daily Load (TMDL) for elevated temperature in the Mattole River Watershed³. The Mattole River Watershed Temperature TMDL has assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The following actions constitute a program of implementation to achieve the Mattole River Watershed Temperature TMDL and are consistent with the *Policy for the Implementation of the Water Quality Objectives for Temperature*.

4-9.00 3/2014

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³ The *Mattole River Total Maximum Daily Loads for Sediment and Temperature* (2002) contains a problem statement, source analysis, numeric targets, load allocations, linkage analysis, and margin of safety. Please see the individual TMDL document for more information.

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Source or Land Use Activity and Responsible Party Timber Harvest Activities on Non- Federal Lands	Action Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are
Responsible Party Timber Harvest Activities on Non- Federal Lands	Regional Water Board staff shall make recommendations for additional measures to
Timber Harvest Activities on Non- Federal Lands	Regional Water Board staff shall make recommendations for additional measures to
Activities on Non- Federal Lands	Regional Water Board staff shall make recommendations for additional measures to
Federal Lands	
	officers and this is the control and that of quality objectives for temperature are
l	achieved during the timber harvest review process, as necessary.
Regional Water	<u></u>
Board	<u>Timeline</u>
	Ongoing
Timber Harvest	<u>Action</u>
Activities on Non-	Implement riparian management measures that meet the riparian shade allocations and
Federal Lands	water quality standards. Where the Forest Practice Rules are not sufficient to meet the
Portion conducting	TMDL allocations or water quality standards, implement additional measures as directed by Regional Water Board staff during the timber harvest review process.
Parties conducting timber harvest	by Neglonal Water Board Stall during the timber harvest review process.
activities that	Timeline
discharge waste or	Ongoing
have the potential to	
discharge waste	
Agricultural	Action
Activities on Non- Federal Lands	Develop and implement the Agricultural Lands Discharge Program as a mechanism for
rederal Lands	compliance with temperature objectives.
Regional Water	Timeline
Board	Upon adoption
Agricultural	Action
Activities on Non-	Implement riparian management measures that meet the riparian shade load allocations
Federal Lands	and water quality standards.
Danifer and other	
	Origonia
	Action
discharge waste on	Discharge Program when adopted.
nonfederal land,	
except dairies.	
D 10 : :	
Jan., Lando	
Deciency	Waiver of WDRs).
Regional Water	
Board Regional Water	I A - 4:
	Action
	In the event that a county does not show intent to implement the 5C Waiver of WDRs,
	In the event that a county does not show intent to implement the 5C Waiver of WDRs,
Parties conducting activities associated with agriculture that discharge waste or have the potential to discharge waste on nonfederal land, except dairies. Road Construction and Associated Maintenance on County Lands	Timeline Ongoing Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted. Timeline Upon adoption of the Agricultural Lands Discharge Program Action Implement Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program In the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coast Region (5C Waiver of WDRs).

4-10.00 3/2014

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Source or Land Use	Implementation Actions
Activity and Responsible Party	
Road Construction and Maintenance on County Lands	Action Conduct road construction and maintenance in compliance with the 5C Waiver of WDRs.
Humboldt and Mendocino Counties	Timeline Pursuant to the 5C Waiver of WDRs timelines.
Dredge and Fill Activities in Waters of the State	Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
Regional Water Board	Timeline Ongoing
Waste Discharge Requirement Program	Action Incorporate measures to meet the temperature allocations and water quality objectives for temperature in Waste Discharge Requirements and Waivers thereof.
Regional Water Board	Timeline Ongoing
Water Use Regional Water Board State Water	Action Work with other agencies and non-governmental organizations to support off-stream storage projects for water diverters currently diverting directly from streams during summer. Work with other agencies and non-governmental organizations to streamline permitting process for conversion of on-stream to off-stream storage.
Resources Control Board, Division of Water Rights	Timeline Ongoing
Water Use Water users	Action The Regional Water Board encourages all water users to implement water conservation practices and develop off-stream storage facilities to minimize water diversions during low flow periods. Timeline
	Ongoing
Water Use Regional Water Board State Water	Action Pursue instream flow studies, including the following actions: • Work with other agencies and non-governmental organizations to support instream flow studies to: (1) quantify flows necessary for beneficial use support, (2) quantify flow impacts to assist outreach and education efforts, or (3) identify opportunities to increase summer low flows. • Coordinate with the California Department of Fish and Wildlife on the
Resources Control Board, Division of Water Rights	 development, methodologies, and any criteria relevant to instream flow studies. Consider all sources of water, including headwaters, groundwater, and waters flowing in subterranean streams.
	Timeline Until complete

4-11.00 3/2014

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Support third-party efforts to address temperature related concerns, including: • Education of water users on the importance of water conservation efforts, • Education of water users on water conservation practices and opportunities, • Assistance for water users in the implementation of water conservation practices, • Restoration of riparian vegetation, • Other efforts that address water temperature-related concerns. Timeline Ongoing
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Take actions to address the temperature impacts of marijuana cultivation, through the following:
Water Use Regional Water Board	Action Continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, conducting joint inspections as appropriate, submitting data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participating in instream flow studies, participating in proceedings related to instream flow, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature. Timeline Ongoing

4-12.00 3/2014